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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/817,604

04/02/2004

Gary L. White

370002-00080 CIP

3127

3705 7590 03/12/2007
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EXAMINER

CHIMIAK, EMILY ANN

ART UNIT

PAPER NUMBER

1733

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

03/12/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/817,604

Applicant(s)

WHITE ET AL.

Examiner

Emily Chimiak

Art Unit

1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 15-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 15-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claims 1-5 and 15-18 in the reply filed on 02/09/2007 is acknowledged.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Gray, III (US 4327121).

As to claim 1, Gray, III discloses casting one or more lamina including polyvinyl chloride, polyurethane (binder) and pigment onto a strippable sheet to make a transferable printed design, and curing the design. The casting is provided with the surface effect which is the reverse of the release surface. Gray, III. discloses that it is known in the art to impart to the surface of the plastic material the quality of finish of the release surface, such as a textured (matte) surface i.e. employing the texture of the support surface to provide the first surface with a matte finish (col. 1 lines 18-21, col. 2 lines 62-65, col. 4 lines 25-30 and col. 5 lines 10).

As to claim 2, when a textured base is supplied, the side of the casting that does not contact the base will have a glossier finish (col. 2 lines 60-63).

As to claim 5, the method disclosed by Gray, III. produces a strippable sheet (col. 4 lines 29-32).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 3, 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burgess et al. (US 20020178574) in view of Grey, III.

As to claim 1, Burgess et al. teaches casting plastisol (pigments and binder) onto a transfer sheet, fusing the plastisol into a sheet and stripping the transfer sheet from the PVC sheet (paragraph 0055). It is noted that the PVC sheet is suitable for use on a building and that the surface of cast plastisol 43 that contacts transfer sheet 41 is the first surface.

Art Unit: 1733

Burgess et al. teaches using roll 46 to emboss the sheet of plastisol, but does not teach employing the texture of the support surface to provide the first surface with a matte finish when the coloring material is removed from the substrate.

However, Gray, III. discloses that it is known in the art to impart to the surface of the plastic material the quality of finish of the release surface (col. 1 lines 18-21).

It would have been obvious to one of ordinary skill in the art at the time of invention to provide a matte finish to the PVC sheet of Burgess et al. by using a textured release surface as taught by Grey, III.

As to claim 3, Burgess et al. discloses fusing the particles of PVC in the binder under heat i.e. curing the flowable initial material and heating the flowable initial material and fusing together the plastic particles (paragraph 0055).

As to claim 4, the plastisol is cast onto a transfer sheet that is drawn off of a supply roll 42 (a web). In one embodiment, the transfer sheet is paper (paragraph 0054 and paragraph 0070, claim 10).

As to claim 5, the PVC sheet may be separated from the transfer sheet (paragraph 0055).

7. Claim 15, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gray, III. in view of Bull et al. (US 6254711).

As to claim 15, Gray, III. discloses a cast film of more than one lamina in a consolidated decorative laminate (applying onto a support surface a first and second flowable initial material). The cast film is comprised of polyvinyl chloride plastisol, i.e. the first and second binders include a plastisol (col. 4 lines 1-30). It is noted that a heat transferable printed design requires the first coloring material to be embedded into the second and that the decorative laminate may be used to form a laminated plastic building panel.

Gray, III does not disclose at least partially curing the first flowable material prior to applying the second.

However, Bull et al. discloses a method of making a transferable coloring sheet where pigment layers can be applied in successive lamination steps (col. 8 lines 48-50).

It would have been obvious to one of ordinary skill in the art at the time of invention to apply the pigment layers in one or several successive lamination steps as taught by Bull et al. depending on the intended application and the desired effect.

As to claim 17, Gray, III. discloses applying cast films that form a heat transferable printed design, i.e. applying the first flowable material onto the support surface according to a predetermined pattern (col. 4 lines 25-29).

As to claim 18, Gray, III. does not disclose two different colors in the heat transferable printed design.

However, Bull et al. discloses one black layer and one white layer in order to make one side of the transferable coloring sheet light reflecting and one light absorbing (col. 6 lines 25-44).

It would have been obvious to one of ordinary skill in the art at the time of invention to use a different pigment for the first and second cast films of Gray, III. in order to produce a light reflecting side and a light absorptive side of the colorant transfer component as taught by Bull et al.

8. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gray III. and Bull et al. as applied to claim 15, and further in view of P.P.A. Burnett (US 2874416).

Gray, III. as modified above does not disclose performing all of the steps in a single inline process.

However, P.P.A. Burnett discloses coating a release sheet comprised of polyvinyl chloride onto a paper roll with three resinous layers that is printed with rollers and heated between coatings, i.e. at least partially curing the first flowable material prior to applying the second, and performing all of the steps in a single inline process (col. 2 lines 50-67 and col. 3 lines 1-60).

It would have been obvious to one of ordinary skill in the art at the time of invention to perform all of the steps in a single inline process with curing between layers in order to form products in rolls that are convenient for handling as taught by P.P.A. Burnett.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emily Chimiak whose telephone number is (571)272-6486. The examiner can normally be reached on Monday-Friday 8:30-5:30 EST.

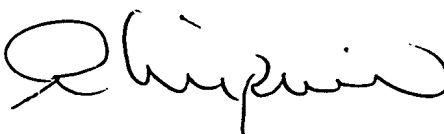
Art Unit: 1733

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571)272-6486. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ee

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